



IPW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: John W. Pettit

Serial No: 10/735,707

Filed: December 16, 2003

For: DETECTOR USING CARBON NANTOUBE MATERIAL AS COLD CATHODE FOR SYNTHETIC RADIATION SOURCE

GAU: 2882

Confirmation No. 3452

Examiner: UNASSIGNED

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.97

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicant(s) wish to disclose the following information.

REFERENCES

- ☒ The applicant(s) wish to make of record the references listed on the attached form PTO-1449. Copies of the listed references are attached, where required, as are either statements of relevancy or any readily available English translations of pertinent portions of any non-English language references.
- ☐ A check is attached in the amount required under 37 CFR §1.17(p).

RELATED CASES

- ☐ Attached is a copy of applicant's pending application(s) or issued patent(s) which may be related to the present application. These documents are listed on form PTO-1449, also attached.
- ☐ A check is attached in the amount required under 37 CFR §1.17(p).

CERTIFICATION

- ☐ Each item of information contained in this information disclosure statement was cited for the first time in any communication from a foreign patent office in any counterpart foreign application not more than three months prior to the filing of this statement.
- ☐ No item of information contained in this information disclosure statement was cited for the first time in any communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the undersigned, having made reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this statement.
- ☐ This Information Disclosure Statement is being filed within three months of the filing date of the subject patent application.
- ☒ This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits.

PETITION

- ☐ Applicant(s) hereby request consideration of the attached information. A check is attached in the amount of the Petition fee required under 37 CFR §1.17(i)(1).

DEPOSIT ACCOUNT

- ☒ Please charge any additional fees for the papers being filed herewith and for which no check is enclosed herewith, or credit any overpayment to deposit account number 23-2185. A duplicate copy of this sheet is enclosed.

Blank Rome LLP
600 New Hampshire Avenue, N.W.
Washington, DC 20037
Tel: (202) 772-5800
Fax (202) 572-8398
Customer No.: 27557

Date: January 28, 2005

Respectfully submitted,

Michael C. Greenbaum
Attorney of Record
Registration No. 28,419



TO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/735,707
Filing Date	December 16, 2003
First Named Inventor	JOHN W. PETTIT
Art Unit	2882
Examiner Name	UNASSIGNED
Attorney Docket Number	000049-00110

Sheet 1 of 2

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	1	Eclipse Cold Cathode X-Ray Source, Oxford Instruments, X-Ray Tech., Inc., Scotts Valley, CA	
	2	Laser-X, Amp Tek, Bedford, MA	
	3	"Enhanced Field Emission From Nanostructured Carbon Films", I. Pavolsky, et al.	
	4	"Reversible Band-Gap Engineering In Carbon Nanotubes by Radial Deformation", O. Gülseren, et al., Physical Review B., Vol. 65, 155410, The American Physical Society, pp. 155410-1 through 154410-7	
	5	"Terfenol-D Sensor Design and Optimization", F. Calkins, et al., Aerospace Engineering and Engineering Mechanics Dept., Iowa State University, pp. 1-10	
	6	"Better Sonar Driven By New Transducer Material", C. Bright, ETREMA Products, Inc., ST Sonar Feature	
	7	"Variable and Reversible Quantum Structures on a Single Carbon Nanotube", C. Kilic, et al., Physical Review B, Vol. 62, No. 24, The American Physical Society, December 15, 2000	
	8	"Nano Electro Mechanics of Semiconducting Carbon Nanotube", S. Peng, et al., Journal of Applied Mechanics, July 2002, Vol. 69, pp. 451-453	
	9	"Large Magnetostriction in Terfenol-D Particulate Composites With Preferred [112] Orientation", G. McKnight, et al., Smart Structures and Materials 2001, pp. 179-183	
	10	"Fullerene Nanotube in Electric Fields", L. Lou, et al., Physical Review B, July 15, 1995, pp. 1429-1432	

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



TO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no person shall be required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/735,707
Filing Date	December 16, 2003
First Named Inventor	JOHN W. PETTIT
Art Unit	2882
Examiner Name	UNASSIGNED
Attorney Docket Number	000049-00110

Sheet 2 of 2

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	11	"Switching Behavior of Semiconducting Carbon Nanotubes Under an External Electric Field", A. Rochefort, et al., Applied Physics Letters, Vol. 78, No. 17, April 23, 2001, pp. 2521-2523	
	12	"High Performance Electrolyte-Gated Carbon Nanotube Transistors", Sami Rosenblatt, et al., Laboratory of Atomic and Solid Physics, Cornell University, pp. 1-12	
	13	"Water-Soluble and Optically pH-Sensitive Single-Walled Carbon Nanotubes from Surface Modification", W. Zhao, et al., Department of Chemistry, University of Arkansas, American Chemical Society, 2002, pp. 12418 and 12419	
	14	"Quantitative Analysis of Optical Spectra from Individual Single-Wall Carbon Nanotubes", A. Hagen, et al., Nano Letters in Press, Dept. of Physical Chemistry, Fritz-Haber-Institute de Max-Planck-Gesellschaft, Berlin, Germany, pp. 1-6	
	15	"Carbon Nanotube Chemical and Mechanical Sensors", S. Peng, et al., Stanford University, Conference Paper for the Third International Workshop on Structural Health Monitoring, pp. 1-8	
	16	"Variable and Reversible Quantum Structures on a Single Carbon Nanotube", C. Kilic, et al., March 9, 2000, pp. 1-7	
	17	"Reversible Band Gap Engineering in Carbon Nanotubes by Radial Deformation", O. Gulseren, et al., March 11, 2002, pp. 1-8	

Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

BR 06/04

000049.00110/35661998v1